Report Date: 01 Oct 2014

Summary Report for Individual Task 052-247-1215 Construct a Confined Space Retrieval System Status: Approved

**Distribution Restriction:** Approved for public release; distribution is unlimited.

**Destruction Notice:** None

Foreign Disclosure: FD1 - The materials contained in this course have been reviewed by the course developers in coordination with the Ft Leonard Wood MO/MSCOE foreign disclosure

**Condition:** You are a member of an Urban Search and Rescue (US&R) team and given a confined space rescue incident, required personal protective equipment (PPE), tripod system with chain, hitch pins, a belay system, 1/2" life safety rope, pulleys, carabiners and progress capture devices (PCD). This task should not be trained in MOPP 4.

**Standard:** Construct a confined space rescue retrieval system ensuring the system can accommodate the load, is capable of controlling the descent and ascent, holding the load in place, raising or lowering the load with minimal effort over required distance and is connected to a proper anchor system in accordance with (IAW) National Fire Protection Association (NFPA) 1006.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

# **DANGER**

None

### **WARNING**

None

## **CAUTION**

None

Remarks: All required references and technical manuals will be provided by the local US&R Command.

Notes: None

### **Performance Steps**

1. Construct a 4:1 mechanical advantage system. (See task 052-247-1302)



Figure 052-247-1215-3 4:1 Mechanical Advantage System

- 2. Remove the tripod from its storage case.
- 3. Stand the tripod up and spread the legs outward to the maximum distance allowed by the tripod head.

  Note: The steel chain connects the feet to prevent over spreading of the legs when the tripod is loaded.



Figure 052-247-1215-2 Chain

- 4. Attach the mechanical advantage system to the attachment point on the tripod system.
- 5. Attach a completed belay system to an independent attachment point on the tripod. (See task 031-627-2151)
- 6. Extend the tripod legs and lock them into position with the hitch pins.

Note: The legs adjust in five inch (5") increments for leveling on uneven surfaces and/or to achieve height adjustment from 6 to 10 feet at the anchors.

7. Attach the retrieval line of the mechanical advantage system to a fixed point outside the space.

Note: When hoisting a load using the tripod, the load must be lifted vertically and centered within the triangle formed by the legs to prevent destabilization. Check the label attached to the tripod to determine the safe working load for the height at which you have set the tripod. The letter markings on the legs correspond to the safe working loads on the label. Do not load the tripod with weight in excess of the safe working loads indicated on the label.

8. Perform a system safety check. (See task 031-627-2152)

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all measures are passed (P). Score the Soldier NO-GO if any measure is failed (F). If the Soldier fails any measure, show him how to do it correctly.

**Evaluation Preparation:** Provide the Soldier with all the items listed in the condition. Tell the Soldier to construct a confined space retrieval system.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Constructed a 4:1 mechanical advantage system. (See task 052-247-1302)			
2. Removed the tripod from its storage case.			
3. Stood the tripod up and spread the legs outward to the maximum distance allowed by the tripod head.			
4. Attached the mechanical advantage system to the attachment point on the tripod system.			
5. Attached a completed belay system to an independent attachment point on the tripod. (See task 031-627-2151)			
6. Extended the tripod legs and locked them into position with the hitch pins.			
7. Attached the retrieval line of the mechanical advantage system to a fixed point outside the space.			
8. Performed a system safety check. (See task 031-627-2152)			

#### Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	29 CFR 1910	Occupational Safety and Health Standards	No	No
	IFSTA	International Fire Service Training Association (IFSTA) Fire Service Search and Rescue, 7th Edition	No	No
		IFSTA Technical Rescue for Structural Collapse, 1st Edition	No	No
	NFPA 1006	Standard for Rescue Technician Professional Qualifications	Yes	Yes

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

#### Prerequisite Individual Tasks: None

#### **Supporting Individual Tasks:**

Task Number	Title	Proponent	Status
052-247-1303	Belay a Falling Load	052 - Engineer (Individual)	Approved
031-627-2153	Operate a Belay System	031 - CBRN (Individual)	Approved
031-627-2152	Conduct a System Safety Check	031 - CBRN (Individual)	Approved
031-627-2151	Construct a Belay System	031 - CBRN (Individual)	Approved
052-247-1302	Construct a Simple Rope Mechanical Advantage System for Rope Rescues	052 - Engineer (Individual)	Approved
031-627-2148	Construct a Single Point Anchor System	031 - CBRN (Individual)	Approved
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Approved

### **Supported Individual Tasks:**

Task Number	Title	Proponent	Status
052-247-1301	Tie Knots, Bends, and Hitches for Rope Rescues	052 - Engineer (Individual)	Approved
052-247-1218	Perform Rescue of an Injured or Unconscious Victim from a Confined Space	052 - Engineer (Individual)	Analysis

## **Supported Collective Tasks:**

Task Number	Title	Proponent	Status
05-3-8014	Perform a Structural Collapse Rescue Operation	05 - Engineers (Collective)	Approved
05-3-8011	Perform Rope Rescue Operations	05 - Engineers (Collective)	Approved
05-3-8013	Perform Confined Space Rescue Operations	05 - Engineers (Collective)	Approved